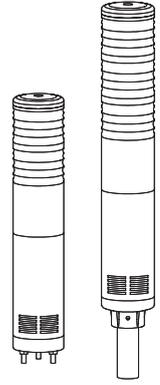


# USB LED Tower Lights

## ST45(M)L/ ST56(M)EL/ ST80(M)EL-USB



Thank you for purchasing Qlight's products. Please read this user manual carefully prior to installation and operation to ensure safe and correct use.

### ⚠ Precautions for Safety

Failure to follow the instructions below may cause a loss of life or serious physical injury.

1. During wiring or maintenance, please completely turn off the power of the product. (Failure to follow this may lead to an electric shock.)
2. Do not install the product in locations that subjects it to excessive dust or water other than the conditions designated by the IP protection ratings indicated for each product. (Failure to follow these instructions may cause a fire to the product, electric shock, physical injury, malfunction or damage to the product.)
3. Do not alter or repair this product. If maintenance or repair service is required, please contact your local Qlight contact point. (Failure to follow these instructions may lead to fire, electric shock, or product damage.)
4. Please apply the correct voltage to the product. (Failure to follow these instructions may lead to fire, electric shock, or product damage.)
5. When the product is applied to a condition that may impact lives or property, please make sure to have a double safety device. (Failure to follow this may cause damage to property, fire, electric shock and loss of life.)

### ⚠ Precautions for Correct Use

Failure to follow the proper instructions may cause damage to property, the product, and or malfunction of the product that would void the warranty.

1. Please remove any objects that can interrupt ventilation around the product.
2. Please turn off the power of the product immediately if it fails to operate properly.
3. Carefully wire the product according to each product's specification.
4. Please be careful in preventing chemicals such as thinner, benzene, etc. in contact with the surface of the product.
5. Do not apply excessive force/impact to the product.
6. Failure to follow any of the instructions above may cause malfunction or damage to the product, fire, and electric shock.

### Ordering Specification

#### • ST45(M)L-USB

ST45L-USB-BZ	3	RAG	LW18
[Model number]	[Layer]	[Color]	[Mount bracket]
• ST45L-USB-BZ	• Layer1-1	R-Red	• (None)
• ST45L-USB-WS	• Layer2-2	A-Amber	- Standard type
• ST45L-USB-WM	• Layer3-3	G-Green	• Mounting type
• ST45L-USB-WA	• Layer4-4	B-Blue	- LB18 - LW18
• ST45ML-USB-BZ	• Layer5-5	W-White	- QZ18 - SZ18
• ST45ML-USB-WS			- QL18 - SL18
• ST45ML-USB-WM			
• ST45ML-USB-WA			

#### • ST56(M)EL-USB

ST56L-USB-BZ	3	RAG	LW18
[Model number]	[Layer]	[Color]	[Mount bracket]
• ST56EL-USB-BZ	• Layer1-1	R-Red	• (None)
• ST56EL-USB-WS	• Layer2-2	A-Amber	- Standard type
• ST56EL-USB-WM	• Layer3-3	G-Green	• Mounting type
• ST56EL-USB-WA	• Layer4-4	B-Blue	- LB18 - LW18
• ST56MEL-USB-BZ	• Layer5-5	W-White	- QZ18 - SZ18
• ST56MEL-USB-WS			- QL18 - SL18
• ST56MEL-USB-WM			
• ST56MEL-USB-WA			

#### • ST80(M)EL-USB

ST80EL-USB-BZ	3	RAG	LW24
[Model number]	[Layer]	[Color]	[Mount bracket]
• ST80EL-USB-BZ	• Layer1-1	R-Red	• (None)
• ST80EL-USB-WS	• Layer2-2	A-Amber	- Standard type
• ST80EL-USB-WM	• Layer3-3	G-Green	• Mounting type
• ST80EL-USB-WA	• Layer4-4	B-Blue	- LB24 - LW24
• ST80MEL-USB-BZ	• Layer5-5	W-White	- QZ24 - SZ24
• ST80MEL-USB-WS			- QL24 - SL24
• ST80MEL-USB-WM			
• ST80MEL-USB-WA			



Please scan the QR code for more detailed product information.

[www.qlight.com](http://www.qlight.com)

## Product Specifications

### • ST45(M)L-USB

Model number		Layer	Certificate	Color
ST45L-USB-BZ ST45L-USB-WS ST45L-USB-WM ST45L-USB-WA ST45ML-USB-BZ ST45ML-USB-WS ST45ML-USB-WM ST45ML-USB-WA	5 Buzzer sounds 5 Warning sounds 5 Melodies 5 Alarms	1	-	R-Red
		2		R-Red G-Green
		3		R-Red A-Amber G-Green
		4		R-Red A-Amber G-Green B-Blue
		5		R-Red A-Amber G-Green B-Blue W-White

### • ST56(M)EL-USB

Model number		Layer	Certificate	Color
ST56EL-USB-BZ ST56EL-USB-WS ST56EL-USB-WM ST56EL-USB-WA ST56MEL-USB-BZ ST56MEL-USB-WS ST56MEL-USB-WM ST56MEL-USB-WA	5 Buzzer sounds 5 Warning sounds 5 Melodies 5 Alarms	1	CE	R-Red
		2		R-Red G-Green
		3		R-Red A-Amber G-Green
		4		R-Red A-Amber G-Green B-Blue
		5		R-Red A-Amber G-Green B-Blue W-White

### • ST80(M)EL-USB

Model number		Layer	Certificate	Color
ST80EL-USB-BZ ST80EL-USB-WS ST80EL-USB-WM ST80EL-USB-WA ST80MEL-USB-BZ ST80MEL-USB-WS ST80MEL-USB-WM ST80MEL-USB-WA	5 Buzzer sounds 5 Warning sounds 5 Melodies 5 Alarms	1	-	R-Red
		2		R-Red G-Green
		3		R-Red A-Amber G-Green
		4		R-Red A-Amber G-Green B-Blue
		5		R-Red A-Amber G-Green B-Blue W-White

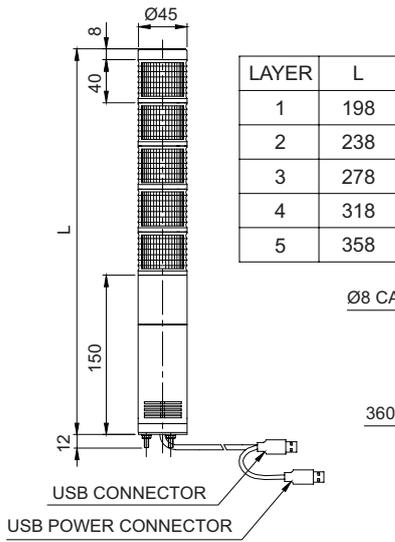
• Protection rating : IP23

• Ambient operating temperature : -30°C to + 50°C

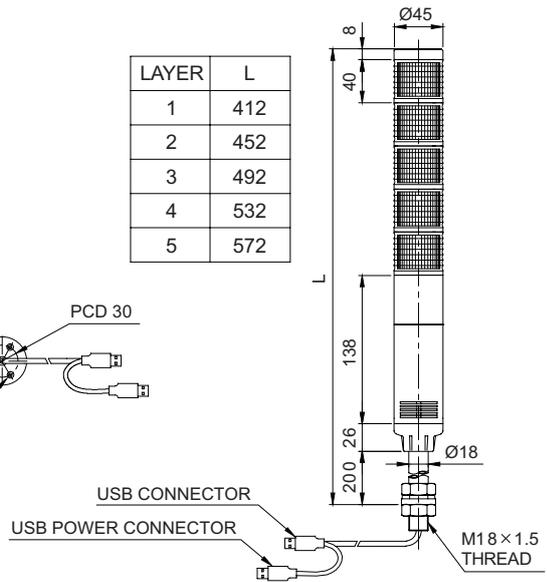
• 2 layers will operate at the same time: ST56EL-USB / ST56MEL-USB / ST80EL-USB / ST80MEL-USB

• 3 layers will operate at the same time: ST45L-USB / ST45ML-USB

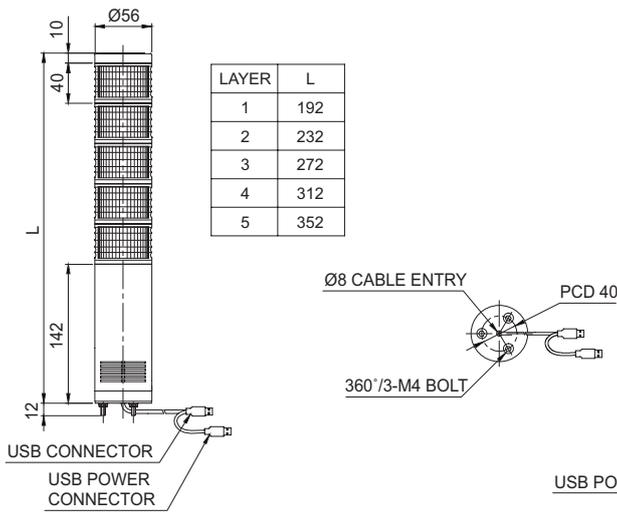
ST45ML-USB



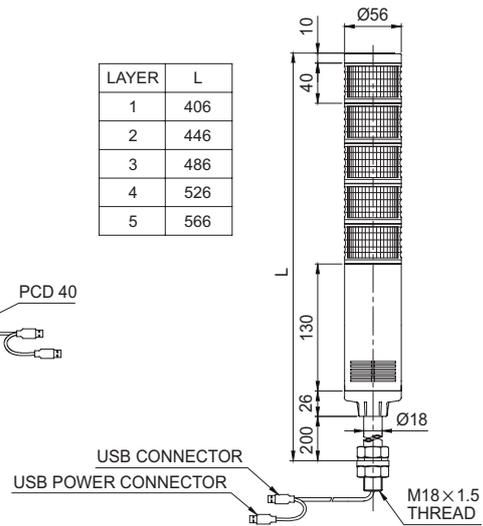
ST45L-USB



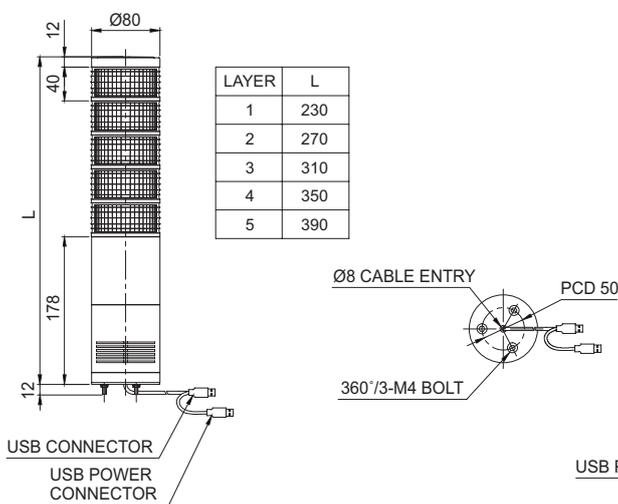
ST56MEL-USB



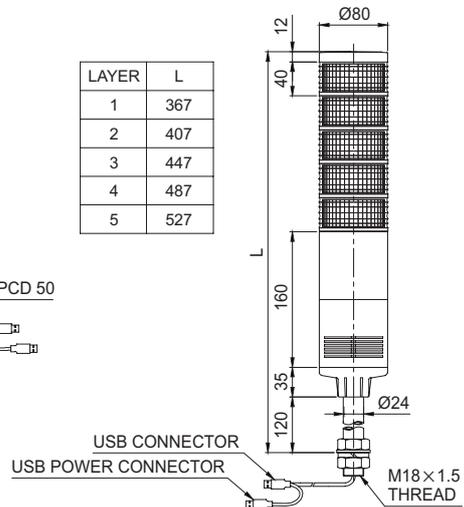
ST56EL-USB



ST80MEL-USB



ST80EL-USB



## USB Cable Wiring Instructions



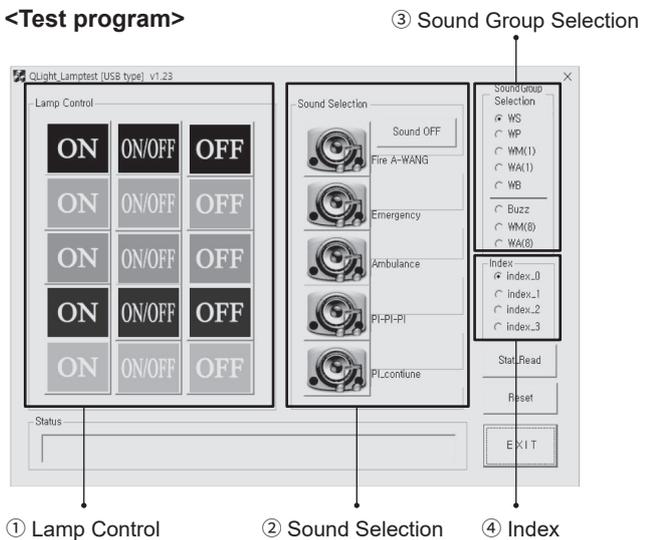
- Connect both USB power connector and USB signal control connector that are connected to each other to USB ports of a PC.
- Product does not run in case of USB power connector connection only.

## Test Instructions

### <For Connecting Method with pc>



### <Test program>



1. Please connect USB Tower Lamp and PC as above figure <How to connect with PC>
2. Please download test program(USB.zip) from Qlight website or blog.qlight.com
3. The downloaded sample program will be saved as "USB Test Program.zip".  
When you unzip the file, there will be a file with the names below.



test program



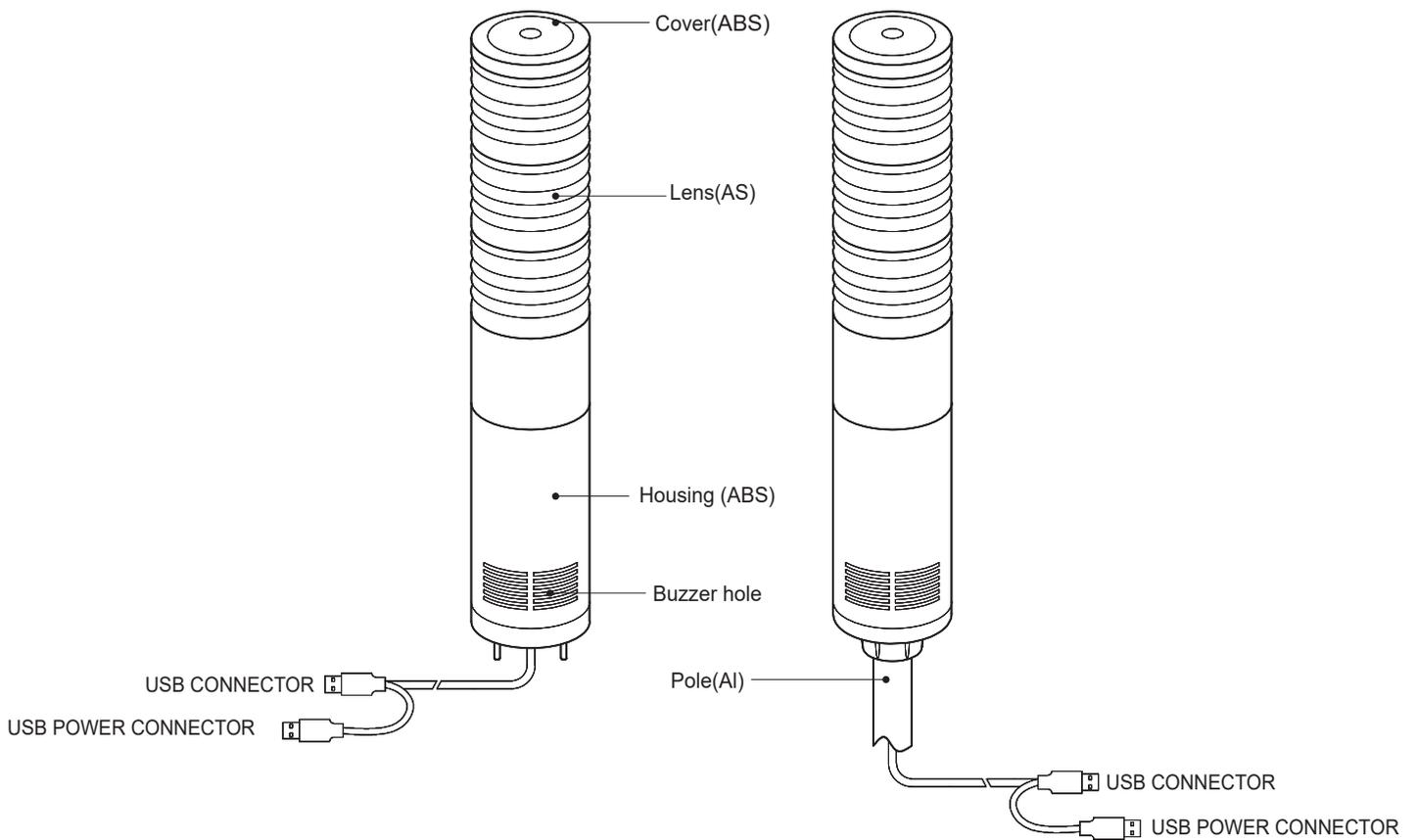
Required library for test program

- ※ When developing the program, please download and refer to the file "manual and library"(sample programs and manuals for developers).
4. When you run the "QLight lamptest\_usb.exe"file, a test programs will show up as above.  
Products sound options are classified as WS / WA / WM / BZ. The product will only play the sound option selected when the order was placed.

### ■ How to use program

Article	Detailed specification
① Lamp control	<ul style="list-style-type: none"> <li>- ON: Lamp turns on when the button is clicked</li> <li>- ON/OFF: Lamp flashes when the button is clicked</li> <li>- OFF: Lamp turns off when the button is clicked</li> </ul>
② Sound selection	<ul style="list-style-type: none"> <li>- 1ch-5ch: Has 5 sounds per model, turns on the chosen sound</li> <li>- Click "Sound off" button to turn off the sound</li> </ul>
③ Sound group selection	<ul style="list-style-type: none"> <li>- WS : 5 warning sounds(mono)</li> <li>- WP : 5 special warning sounds(mono)</li> <li>- WM(1) : 5 Melodies(mono)</li> <li>- WA(1) : 5 alarms(mono)</li> <li>- WB : Software Buzzer 5 sounds(speaker type)</li> <li>- Buzzer : 5 Buzzer sounds</li> </ul>
④ Index	<ul style="list-style-type: none"> <li>- You can connect up to a maximum of 4 USB Tower lights per PC</li> <li>- Must be controlled by selecting Index0 - Index3 for controlling the USB tower light. The default is set to Index0</li> </ul>

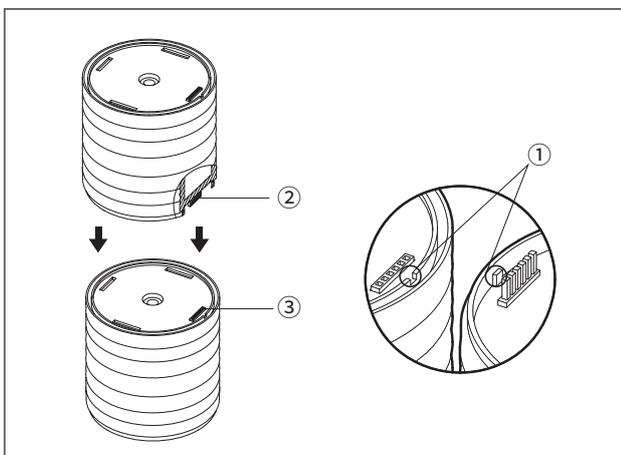
## Parts Definition



## Installation Environment and Protection Rating

- This product is designed for use with protection rating of IP23.
- If the product is installed in locations that subject it to excessive dust or water other than the designated IP protection rating indicated(IP23), it may cause malfunction or damage to the product.
- For further information, please visit our website ([www.qlight.com](http://www.qlight.com)).

## How to Change Lens Kit



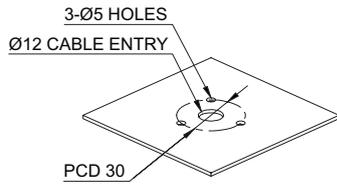
- When rearranging or replacing the lens kits, please be aware of the contact point ① and the connector pin ② marked in the diagram on the left.
- Press down to assemble the lens kits while making sure that connector pin ② and connector ③ aligns correctly.
- Please make sure that the rubber spacer placed on the top of each lens kit is tightly secured to the bottom of the other lens kit.

### ※Cautions

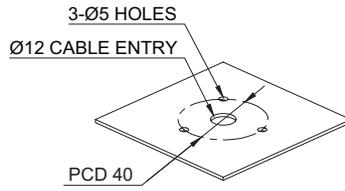
Lens modules are connected via the contact point of each module. In case the contact point is damaged, it may cause contact failure.

## Mounting Hole Specifications

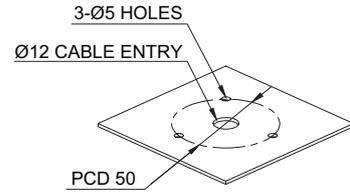
① Machine holes on the mounting surface referring to the diagram below.



ST45ML-USB



ST56MEL-USB



ST80MEL-USB

② Remove the flange nuts from bolts and place the product through the mounting surface holes.

③ Fasten the flange nuts on the opposite side of the mounting surface until the product is tightened securely.

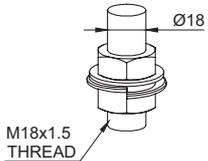
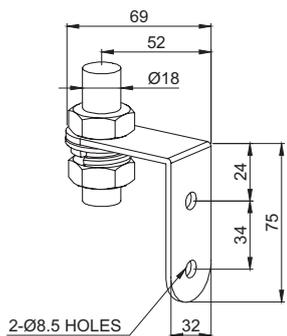
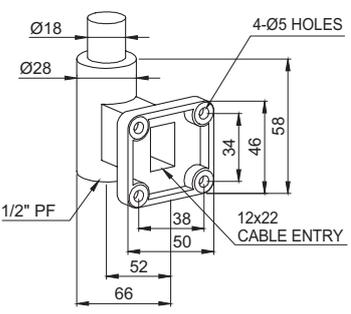
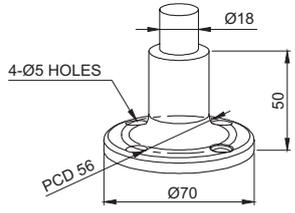
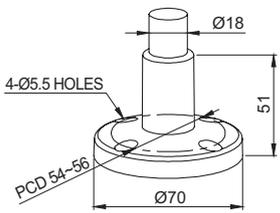
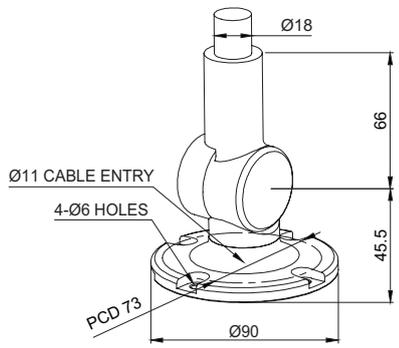
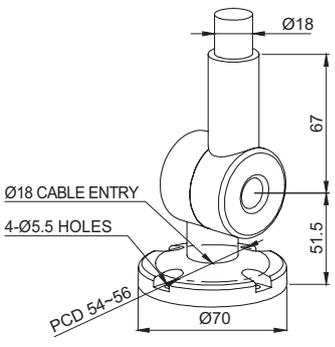
## Mounting Accessories (Sold Separately)

• Please refer to the dimensions below for installation of mounting brackets

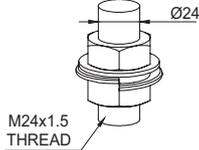
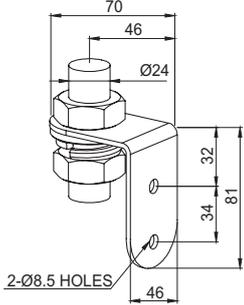
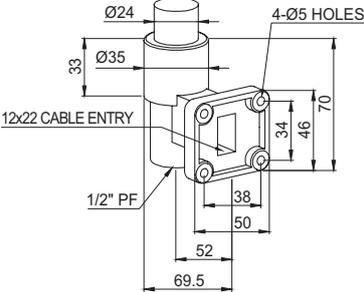
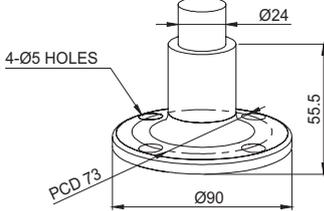
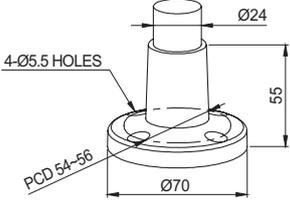
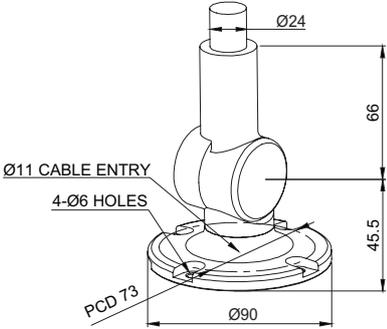
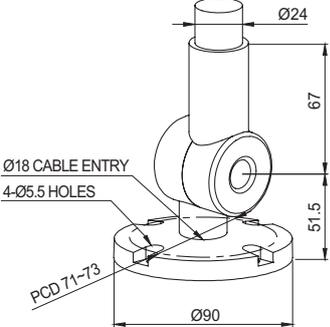
### ■ ST45ML-USB/ ST56MEL-USB/ ST80MEL-USB - Direct mounting Type Model

	Dimensions	
<p>ST45ML-USB ST56MEL-USB</p>	<p>TWS45</p>	<p>TWA45</p>
<p>ST80MEL-USB</p>	<p>TWS80</p>	<p>TWA80</p>

■ ST45L-USB/ ST56EL-USB - Pole Mounting Type Model

		Dimensions		
ST45L-USB ST56EL-USB	 <p>M18x1.5 THREAD</p> <p>Ø18</p>	 <p>69</p> <p>52</p> <p>Ø18</p> <p>24</p> <p>34</p> <p>75</p> <p>32</p> <p>2-Ø8.5 HOLES</p>	18mm SCREW & NUT	LB18
	 <p>Ø18</p> <p>Ø28</p> <p>4-Ø5 HOLES</p> <p>58</p> <p>34</p> <p>46</p> <p>1/2" PF</p> <p>38</p> <p>50</p> <p>12x22 CABLE ENTRY</p> <p>52</p> <p>66</p>	 <p>Ø18</p> <p>4-Ø5 HOLES</p> <p>50</p> <p>PCD 56</p> <p>Ø70</p>	LW18	SZ18
	 <p>Ø18</p> <p>4-Ø5.5 HOLES</p> <p>51</p> <p>PCD 54-56</p> <p>Ø70</p>	 <p>Ø18</p> <p>66</p> <p>Ø11 CABLE ENTRY</p> <p>4-Ø6 HOLES</p> <p>45.5</p> <p>PCD 73</p> <p>Ø90</p>	QZ18	SL18
	 <p>Ø18</p> <p>67</p> <p>Ø18 CABLE ENTRY</p> <p>4-Ø5.5 HOLES</p> <p>51.5</p> <p>PCD 54-56</p> <p>Ø70</p>		QL18	

■ ST80EL-USB - Pole Mounting Type Model

		Dimensions		
ST80EL-USB	 <p>M24x1.5 THREAD</p> <p>Ø24</p>	24mm SCREW & NUT	 <p>70</p> <p>46</p> <p>Ø24</p> <p>32</p> <p>34</p> <p>81</p> <p>2-Ø8.5 HOLES</p> <p>46</p>	LB24
	 <p>Ø24</p> <p>4-Ø5 HOLES</p> <p>33</p> <p>Ø35</p> <p>12x22 CABLE ENTRY</p> <p>1/2" PF</p> <p>34</p> <p>46</p> <p>70</p> <p>38</p> <p>50</p> <p>52</p> <p>69.5</p>	LW24	 <p>Ø24</p> <p>4-Ø5 HOLES</p> <p>PCD 73</p> <p>Ø90</p> <p>55.5</p>	SZ24
	 <p>Ø24</p> <p>4-Ø5.5 HOLES</p> <p>PCD 54-56</p> <p>Ø70</p> <p>55</p>	QZ24	 <p>Ø24</p> <p>Ø11 CABLE ENTRY</p> <p>4-Ø6 HOLES</p> <p>PCD 73</p> <p>Ø90</p> <p>45.5</p> <p>66</p>	SL24
	 <p>Ø24</p> <p>Ø18 CABLE ENTRY</p> <p>4-Ø5.5 HOLES</p> <p>PCD 71-73</p> <p>Ø90</p> <p>51.5</p> <p>67</p>	QL24		

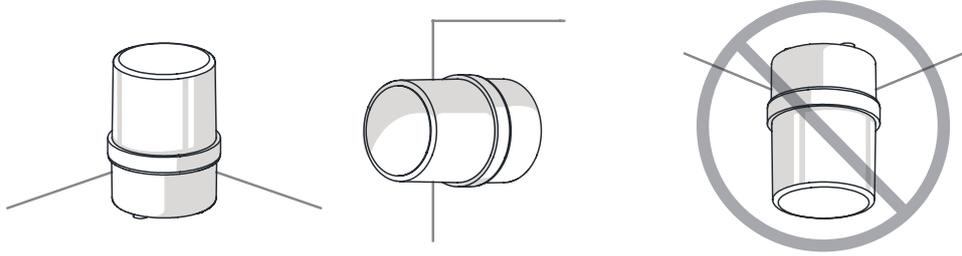
## Product installation direction

- Install the product in accordance with the manual. Otherwise rainwater or moisture may penetrate into the product.

### · BEACON/SIGNALING LIGHT

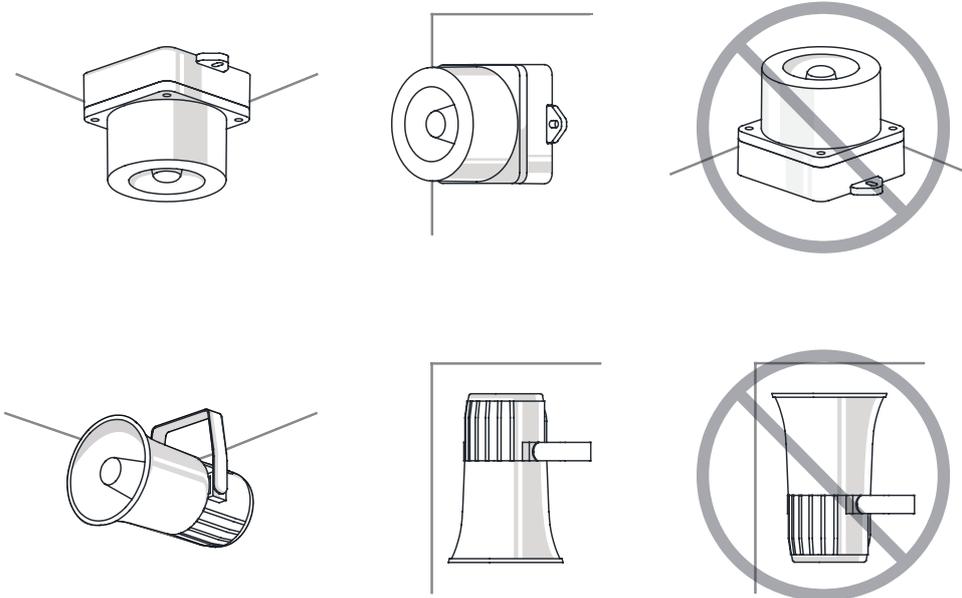
※ For products with a protection rating of less than IPX4, please install it vertically.

Power cord inlet part shall not be facing the sky.



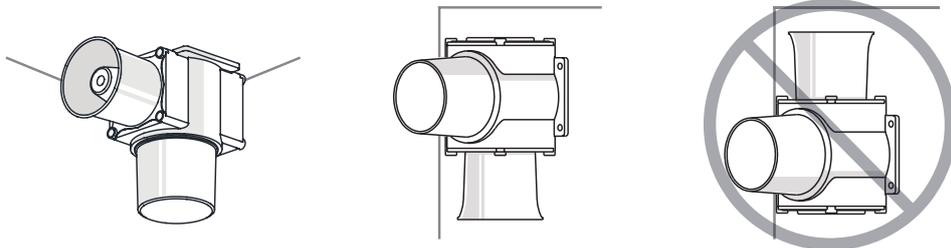
### · ELECTRONIC SOUNDER/SIGNAL HORN

Sounder part shall not be facing the sky.



### · HEAVY-DUTY & EXPLOSION PROOF SIGNALINGS

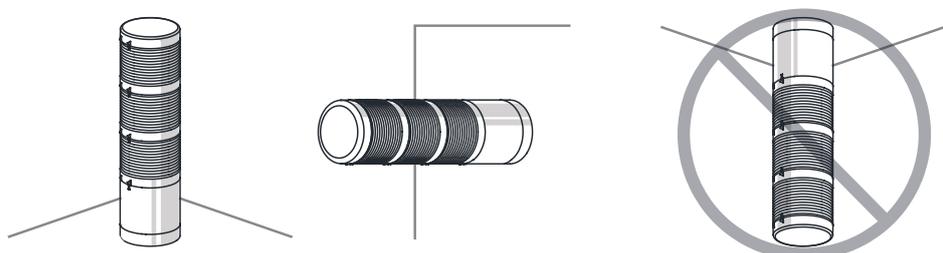
Sounder part shall not be facing the sky.



### · SIGNAL TOWER LIGHTS

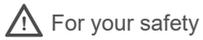
※ For products with a protection rating of less than IPX4, please install it vertically.

Power cord inlet part shall not be facing the sky.









For your safety

Specification and dimensions listed in this catalogue subject to change without notice for product quality improvement.  
The newest product information is available on our website.(www.qlight.com)  
Please read the instruction manual attached to the product carefully before installation and use.

*Qlight Co., Ltd. www.qlight.com | trade@qlight.com*

Head Office | Suite #1510, STX-V Tower, 128 Gasan digital 1-ro, Geumcheon-gu, Seoul, Korea

Tel. +82-2-2679-6152(Toll free. +82-80-328-2222) Fax. +82-2-2679-6154

Factory | 185-25, Mukbang-ro, Sangdong-myeon, Gimhae-si, Gyeongsangnamdo, Korea Tel. +82-55-328-1111(Toll free. +82-80-328-1111)

Qlight Overseas Sales Dept | 704 Nakdong-daero, Sasang-gu, Busan, Korea(Eomgung-Dong) Tel : +82-51-620-4100

Qlight Public Relations & Marketing Team Office | 704 Nakdong-daero, Sasang-gu, Busan, Korea(Eomgung-Dong) Tel. +82-51-245-0017

---

*SHANGHAI Qlight Electronic Co., Ltd. www.qlight.com www.qlightcn.com | qlightcn@qlight.com*

China Factory/ Shanghai Sales Office | #Room 333 Building B, #11, Lane 450, Zhenda Road, Baoshan District, Shanghai, China

Tel. +86-21-6651-7100 Fax. +86-21-6315-3929

China Factory Site 2 (Qidong) | #33, Haiyan Road, Qidong High-tech Industrial Development Zone, Qidong, Jiangsu Province, China

Tel +86-513-8384-9999 Fax +86-513-8384-9910

**Qlightec**

Innovation in Alarm & Signal

Product Operation Inquiry / Customer Support +82-51-620-4100

You can expect prompt service if you have exact information such as model name, symptom, telephone number and address.

※ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Head office : Suite #1510, STX-V Tower, 128 Gasan digital 1-ro, Geumcheon-gu, Seoul, Korea (Postal Code : 08507)

Factory : 185-25, Mukbang-Ro, Sangdong-Myeon, Gimhae-Si, Gyeongsangnam-Do, Korea (Postal Code : 50805)

www.qlight.com

EN - ST45ML-USB - 2409A